

EXHIBIT 1



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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte KELLY D. PHILLIPPS and RICHARD W. WELLMAN

Appeal 2019-002600¹
Application 14/162,571
Technology Center 2100

Before CAROLYN D. THOMAS, JEREMY J. CURCURI, and
JAMES B. ARPIN, *Administrative Patent Judges*.

ARPIN, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant appeals under 35 U.S.C. § 134(a) from the Examiner's final rejection of claims 1–3 and 6–22, all of the pending claims. Final Act. 2.²

¹ The word “Appellant” refers to “applicant” as defined in 37 C.F.R. § 1.42. Appellant identifies the real party-in-interest as Pure Predictive, Inc. Appeal Br. 2.

² In this Decision, we refer to Appellant's Appeal Brief (“Appeal Br.,” filed November 5, 2018) and Reply Brief (“Reply Br.,” filed February 13, 2019); the Final Office Action (“Final Act.,” mailed June 1, 2018), Advisory Action (“Adv. Act.,” mailed August 27, 2018), and the Examiner's Answer (“Ans.,” mailed December 13, 2018); and the Specification (“Spec.,” filed January 23, 2014). Rather than repeat the Examiner's findings and determinations and Appellant's contentions in their entirety, we refer to these documents.

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Claims 4 and 5 are cancelled. *Id.* We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

STATEMENT OF THE CASE

Appellant’s claimed methods and apparatus “relate[] to machine learning and more particularly relates to an action plan generated by machine learning.” Spec. ¶ 2.

As noted above, claims 1–3 and 6–22 are pending. Claims 1, 17, and 21 are independent. Appeal Br. 11 (claim 1), 14–15 (claim 17), 16–17 (claim 21) (Claims App.). Claim 1 recites, “[a] method for an action plan” (*id.* at 11); claim 17 recites, “[a]n apparatus for an action plan, the apparatus comprising: a machine learning module configured to” perform steps substantially as recited in claim 1 (*id.* at 14); and claim 21 recites, “[a]n apparatus for an action plan, the apparatus comprising” means for performing the functions as recited in claim 1 (*id.* at 16). Claims 2, 3, and 6–16 depend directly or indirectly from claim 1; claims 18–20 depend directly or indirectly from claim 17; and claim 22 depends directly from claim 21. *Id.* at 11–17.

Claim 1 is representative.

1. method for an action plan, the method comprising:

simulating multiple different values for one or more non-actionable features of different instances of data by varying at least missing values for the one or more non-actionable features, actual values of the one or more nonactionable features not being changeable by a user;

processing the different instances of data using machine learning to produce one or more results, the different instances of data comprising different values for one or more actionable

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features and the simulated multiple different values for the one or more non-actionable features;

selecting one or more recommended actions based on the one or more results, the one or more recommended actions comprising an action for collecting data associated with at least the missing values for the one or more nonactionable features, the action for collecting data specifying additional types of data to collect for at least the missing values for the one or more nonactionable features, the additional types of data useable for optimizing an action plan for actionable features based on machine learning results produced using the collected additional types of data; and

providing an action plan associated with the one or more recommended actions.

Id. at 11.

REJECTION

The Examiner rejects claims 1–3 and 6–22 under 35 U.S.C. § 101, as directed to patent ineligible subject matter without significantly more.³

Final Act. 2–6. We conduct a limited *de novo* review of the appealed rejection for error based upon the issues identified by Appellant and in light of the arguments and evidence produced thereon. *Ex parte Frye*, 94 USPQ2d 1072, 1075 (BPAI 2010) (precedential). Arguments not made are waived. *See* 37 C.F.R. § 41.37(c)(1)(iv). Unless otherwise indicated, we adopt the Examiner’s findings in the Final Action and the Answer as our own and add any additional findings of fact for emphasis. For the reasons given below, we affirm the Examiner’s rejection.

³ The Examiner rejected claims 21 and 22 as indefinite. Final Act. 6–9. The Examiner has withdrawn that rejection. Ans. 3.

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ANALYSIS

Patent Ineligible Claims

A. Section 101

An invention is patent-eligible if it claims a “new and useful process, machine, manufacture, or composition of matter.” 35 U.S.C. § 101. However, the U.S. Supreme Court has long interpreted 35 U.S.C. § 101 to include implicit exceptions: “[l]aws of nature, natural phenomena, and abstract ideas” are not patentable. *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 573 U.S. 208, 216 (2014).

In determining whether a claim falls within an excluded category, we are guided by the Court’s two-part framework, described in *Mayo* and *Alice*. *Id.* at 217–18 (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 75–77 (2012)). In accordance with that framework, we first determine what concept the claim is “directed to.” *See Alice*, 573 U.S. at 219 (“On their face, the claims before us are drawn to the concept of intermediated settlement, *i.e.*, the use of a third party to mitigate settlement risk.”); *see also Bilski v. Kappos*, 561 U.S. 593, 611 (2010) (“Claims 1 and 4 in petitioners’ application explain the basic concept of hedging, or protecting against risk.”). According to the Court, concepts determined to be abstract ideas and, thus, patent ineligible, include certain methods of organizing human activity, such as fundamental economic practices (*Alice*, 573 U.S. at 219–20; *Bilski*, 561 U.S. at 611); mathematical formulas (*Parker v. Flook*, 437 U.S. 584, 594–95 (1978)); and mental processes (*Gottschalk v. Benson*, 409 U.S. 63, 67 (1972)).

In *Diamond v. Diehr*, the claim at issue recited a mathematical formula, but the Court held that “a claim drawn to subject matter otherwise

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statutory does not become nonstatutory simply because it uses a mathematical formula.” *Diamond v. Diehr*, 450 U.S. 175, 187 (1981). Having said that, the Court also indicated that a claim “seeking patent protection for that formula in the abstract . . . is not accorded the protection of our patent laws, . . . and this principle cannot be circumvented by attempting to limit the use of the formula to a particular technological environment.” *Id.* at 191 (citing *Benson* and *Flook*). Nevertheless, the Court noted that “[i]t is now commonplace that an *application* of a law of nature or mathematical formula to a known structure or process may well be deserving of patent protection.” *Id.* at 187; *see also BASCOM Glob. Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1352 (Fed. Cir. 2016) (Even if the individual components were known, “an inventive concept can be found in the ordered combination of claim limitations that transform the abstract idea of filtering content into a particular, *practical application* of that abstract idea.” (emphasis added)).

If the claim is “directed to” an abstract idea, we next “must examine the elements of the claim to determine whether it contains an ‘inventive concept’ sufficient to ‘transform’ the claimed abstract idea into a patent-eligible application.” *Alice*, 573 U.S. at 221. “A claim that recites an abstract idea must include ‘additional features’ to ensure ‘that the [claim] is more than a drafting effort designed to monopolize the [abstract idea].’” *Id.* (quoting *Mayo*, 566 U.S. at 77). “[M]erely requir[ing] generic computer implementation[] fail[s] to transform that abstract idea into a patent-eligible invention.” *Id.*

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B. Office Patent Eligibility Guidance

In an effort to achieve clarity and consistency in how the Office applies the Court’s two-part framework, the Office published revised guidance on the application of 35 U.S.C. § 101. *2019 Revised Patent Subject Matter Eligibility Guidance*, 84 Fed. Reg. 50 (Jan. 7, 2019).⁴ In Step One of our analysis, we look to see whether the claims fall within one of the four statutory categories identified in 35 U.S.C. § 101. *Id.* at 53 (“Examiners should determine whether a claim satisfies the criteria for subject matter eligibility by evaluating the claim in accordance with the criteria discussed in MPEP 2106, *i.e.*, whether the claim is to a statutory category (Step 1) and the *Alice/Mayo* test for judicial exceptions (Steps 2A and 2B).^[5]”).

Under the guidance, we then look to whether the claim recites:

- (1) Step 2A — Prong One: any judicial exceptions, including certain groupings of abstract ideas (*i.e.*, mathematical concepts, certain methods of organizing human activity, such as a fundamental economic practice, or mental processes); and
- (2) Step 2A — Prong Two: additional elements that integrate the judicial exception into a practical application (*see* MPEP § 2106.05(a)–(c), (e)–(h)).

⁴ “All USPTO personnel are, as a matter of internal agency management, expected to follow the guidance.” *2019 Revised Patent Subject Matter Eligibility Guidance*, 84 Fed. Reg. at 51; *see also* *October 2019 Update: Subject Matter Eligibility*, 2 (October 17, 2019) (“Note, the feedback received was primarily directed to examination procedures and, accordingly, this update focuses on clarifying practice for patent examiners. However, all USPTO personnel are expected to follow the guidance.”).

⁵ All Manual of Patent Examining Procedure (“MPEP”) citations herein are to MPEP, 9th Ed. Rev. 10.2019, June 2020.

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See 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed. Reg. at 54–55 (“Revised Step 2A”).

Only if a claim (1) recites a judicial exception *and* (2) does not integrate that exception into a practical application, do we then look to whether the claim:

(3) adds a specific limitation beyond the judicial exception that is not “well-understood, routine, conventional” in the field (*see* MPEP § 2106.05(d)); or

(4) simply appends well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception.

See id. at 56 (“*Step 2B: If the Claim Is Directed to a Judicial Exception, Evaluate Whether the Claim Provides an Inventive Concept.*”).

C. Step One — Claims Directed to Statutory Category

Independent claims 1 and its associated dependent claims are directed to a method, i.e., a process; and each of independent claims 17 and 21 and their associated dependent claims is directed to an apparatus, i.e., a machine. Appeal Br. 11–17 (Claims App.). The Examiner finds that each of claims 1–3 and 6–22 is directed to a recognized statutory category. Final Act. 2.

D. Two-Part Alice/Mayo Framework

1. Step 2A, Prong One — Claims Recite an Abstract Idea

Applying the first part of the *Alice/Mayo* framework (Step 2A), the Examiner finds, “[e]xemplary claims 1, 17, and 21 are directed to the abstract idea of analyzing collected data to provide an action plan. This is similar to other ideas found to be abstract by various courts, such as collecting information, analyzing it, and displaying certain results of the collection and analysis [(*Electric Power Group, LLC v. Alstom, S.A.*, 830

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F.3d 1350, 1356 (Fed. Cir. 2016))].” Final Act. 3. Thus, the Examiner finds that the independent claims recite a mental process. *2019 Revised Patent Subject Matter Eligibility Guidance*, 84 Fed. Reg. at 52 (“Mental processes—concepts performed in the human mind (including an observation, evaluation, judgment, opinion).”); *see also October 2019 Update: Subject Matter Eligibility* at 7 (citing *Electric Power Group*).

The claims generally recite processing data involving values for at least one non-actionable and at least one actionable feature to select at least one recommended data collecting action, and providing an action plan associated with the at least one recommended action. *See e.g.*, Appeal Br. 11 (Claims App.).

An actionable feature, as used herein, comprises a feature which a user may impact, change, or affect, such as a size of a target set, an amount spent on an action, a timing for an action, a location for an action, a product for an action, or the like. A non-actionable feature, as used herein, comprises a feature which a user cannot directly impact, change, or affect, such as the gender of a customer, the zip code of a residence, the cost of a component from a supplier, or the like.

Spec. ¶ 88. In particular, the method of claim 1 recites the steps of:

(1) *simulating* multiple different values for a non-actionable feature of different instances of data by varying at least the missing values for the non-actionable feature; (2) *processing* the different instances of data to produce a result, the different instances of data comprising different values for an actionable feature and the simulated multiple different values for the non-actionable feature; (3) *selecting* a recommended action based on the result, the recommended action comprising collecting data associated with the missing values for the non-actionable feature, the additional data useable for optimizing an action plan for the actionable feature using the collected

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additional data; and (4) *providing* the action plan based on the recommended action. *See e.g.*, Appeal Br. 11 (Claims App.); *see also* Final Act. 3 (analyzing claim limitations). Claims 17 and 21 recite corresponding limitations. Appeal Br. 14–17 (Claims App.).

Appellant contends the Examiner fails to identify: (1) the abstract idea grouping that the claims recite; and (2) the specific limitations that recite the abstract idea. Reply Br. 3. Nevertheless, the Examiner finds, “the claim is essentially directed to analyzing collected data to provide an action plan.” Final Act. 3. The Office groups collecting information, analyzing it, and displaying certain results of the collection and analysis within mental processes. *October 2019 Update: Subject Matter Eligibility* at 7. Further, the Examiner identifies the claim limitations, which support the finding that these claims fall within this grouping. Final Act. 3.

In addition, Appellant contends that the claims do “not recite a mental process because the steps are not practically performed in the human mind.” Reply Br. 4. However, the Office notes:

The courts have found claims requiring a generic computer or nominally reciting a generic computer may still recite a mental process even though the claim limitations are not performed entirely in the human mind.

. . . .

By way of example, examiners may review the specification to determine if the underlying claimed invention is described as a concept that is performed in the human mind and applicant is merely claiming that concept performed 1) on a generic computer, 2) in a computer environment or 3) is merely using a computer as a tool to perform the concept.

October 2019 Update: Subject Matter Eligibility at 8. Here, although the claims recite that the processing may be achieved by “machine learning,” the

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Specification discloses

the action plan module 102 provides and/or accesses a machine learning framework allowing the action plan module 102 and/or clients 104 to request machine learning ensembles or other predictive programs, to make analysis requests, and to receive machine learning results, such as a classification, a confidence metric, an inferred function, a regression function, an answer, a prediction, a recognized pattern, a rule, a recommendation, or other results. Machine learning, as used herein, comprises one or more modules, computer executable program code, logic hardware, and/or other entities configured to learn from or train on input data, and to apply the learning or training to provide results or analysis for subsequent data.

Spec. ¶ 46. Thus, we are persuaded that the recitation of machine learning merely describes the use of machine learning as a tool for performing the analysis or the environment in which the analysis is performed.

We determine that the claims recite a mental process, including observation, evaluation, judgment, and opinion, which is an abstract idea.

2. Step 2A, Prong Two — Abstract Idea Not Integrated Into Practical Application

Under the Office’s Guidance, having determined that the claims recite an abstract idea, we now determine if additional elements in the claims integrate the identified abstract idea into a practical application. *See* MPEP §§ 2106.05(a)–(c), (e)–(h). Thus, we look to see whether the “additional elements” impose a meaningful limit on the identified abstract idea. *See October 2019 Update: Subject Matter Eligibility* at 11.

Claim 1, as well as claims 17 and 21, expressly recites simulating, processing, and collecting “data,” using “machine learning,” and providing an action plan. *See e.g.*, Appeal Br. 11 (Claims App.). Claim 17 further recites “[a]n apparatus” comprising “a machine learning module” for

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accomplishing the operations as recited in claim 1. *Id.* at 14. Although the claims describe the methods and apparatus without specific references to hardware and/or software components, the Specification discloses various generic computer hardware and/or software components to accomplish the recited operations. Spec. ¶¶ 27–33, 35–39. In particular, the Specification explains,

the action plan module 102 provides and/or accesses a machine learning framework allowing the action plan module 102 and/or clients 104 *to request machine learning ensembles or other predictive programs, to make analysis requests, and to receive machine learning results, such as a classification, a confidence metric, an inferred function, a regression function, an answer, a prediction, a recognized pattern, a rule, a recommendation, or other results.* Machine learning, as used herein, comprises one or more modules, computer executable program code, logic hardware, and/or other entities configured to learn from or train on input data, and to apply the learning or training to provide results or analysis for subsequent data.

Id. ¶ 46 (emphasis added). The Specification describes machine learning utilizing known techniques. *See id.* ¶¶ 63–65. Thus, we are persuaded that the claimed methods and apparatus employ generic computer components performing generic computer functions. Final Act. 3; *see* Ans. 3–4.

Therefore, considered individually or as an ordered combination, we are not persuaded that these components recite a particular machine. *See* MPEP § 2106.05(b); *see also* 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed. Reg. at 55 n.27.

Further, applying the second part of the *Alice/Mayo* framework,⁶ the Examiner finds “[t]he claims recite the use [of] machine learning as mere

⁶ We acknowledge that some of the considerations at Step 2A, Prong Two, properly may be evaluated under the second part of the *Alice/Mayo*

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instructions to implement an abstract idea on a computer.” Final Act. 11;
see MPEP § 2106.05(f); *2019 Revised Patent Subject Matter Eligibility Guidance*, 84 Fed. Reg. at 55 n.30.

In addition, the Examiner finds:

The claims do recite that the method is computer-implemented. However, this is merely a generic computer implementation that does not amount to significantly more. Looking at the limitations as an ordered combination adds nothing that is not already present when looking at the elements taken individually. There is no indication that the combination of elements improves the functioning of a computer or improves another technology. Their collective functions merely provide conventional computer implementations.

Final Act. 3; *see* Adv. Act. 2; Ans. 3–5.

Appellant disagrees and contends,

the claimed solution describes a specific **improvement** to machine learning and predictive analytics computing technology. The improvement is directed to optimizing machine learning technology to generate an action plan for one or more recommended actions associated with actionable and non-actionable features. For instance, as recited in the claimed solution, the action plan may be for a recommendation for “collecting data associated with at least the missing values for the one or more non-actionable features,” and the action for collecting data may specify “additional types of data to collect for at least the missing values for the one or more non-actionable features,” which may be used “for optimizing an action plan for actionable features based on machine learning results produced using the collected additional types of data.” In other words, the

framework (Step 2B of the Office guidance). *See* Final Act. 3, 10–12; Ans. 3–7. For purposes of maintaining consistent treatment within the Office, we evaluate those considerations under the first part of the *Alice/Mayo* framework (Step 2A of the Office guidance). *See 2019 Revised Patent Subject Matter Eligibility Guidance*, 84 Fed. Reg. at 55 nn.25, 27–32.

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improvement is directed to continuously optimizing the action plan for actionable features using machine learning, e.g., by teaching computers to analyze data and predict results without user input, by collecting additional data of the recommended types for at least the missing values for the non-actionable features.

Appeal Br. 5–6; *see* Reply Br. 4–5. We are not persuaded by Appellant’s contentions.

First, as noted above, the Specification makes clear known techniques of machine learning and predictive analytics are employed in the claimed methods and apparatus. *See* Spec. ¶¶ 46, 63–65. The alleged improvement is merely recommending missing data for collection and using that data to provide an action plan by known techniques. Here the recommendations for additional data collection are selected through the black box of “machine learning.” *See* Reply Br. 5 (quoting Spec. ¶¶ 45, 46). There is nothing amounting to a technological improvement in using different data to produce a different plan.

Second, the use of computer hardware and/or software components *to optimize* the processing of data may improve the abstract idea, but, in this context, is not a technological improvement. Appeal Br. 5; *see Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363, 1367 (Fed. Cir. 2015) (“[C]laiming the *improved speed or efficiency* inherent with applying the abstract idea on a computer [does not] provide a sufficient inventive concept.” (emphasis added)); *Bancorp Servs., L.L.C. v. Sun Life Assur. Co. of Can. (U.S.)*, 687 F.3d 1266, 1278 (Fed. Cir. 2012) (“[T]he fact that the required calculations could be performed *more efficiently* via a computer does not materially alter the patent eligibility of the claimed subject matter.” (emphasis added)); *see also Synopsys, Inc. v. Mentor Graphics Corp.*, 839

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F.3d 1138, 1151 (Fed. Cir. 2016) (“[A] *new* abstract idea is still an abstract idea.”). Considered individually, the additional elements do not recite an improvement to computer technology. Ans. 3–5; *cf. DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245 (Fed. Cir. 2014) (“Instead, the claimed solution is necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks.”); *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1333 (Fed. Cir. 2016) (“The patents teach that multiple benefits flow from this design. First, the patents disclose an indexing technique that allows for faster searching of data than would be possible with the relational model. Second, the patents teach that the self-referential model allows for more effective storage of data other than structured text, such as images and unstructured text. Finally, the patents teach that the self-referential model allows more flexibility in configuring the database.”). Nor do the additional elements, considered as an ordered combination, improve the technology employed to select the recommended action or to provide the action plan. *Cf. BASCOM*, 827 F.3d at 1350 (“According to BASCOM, the inventive concept harnesses this technical feature of network technology in a filtering system by associating individual accounts with their own filtering scheme and elements while locating the filtering system on an ISP server.”). Unlike *DDR Holdings*, *Enfish*, and *BASCOM*, the limitations of the pending claims, individually or as an ordered combination, improve the action plan, not the technology involved in providing it. Ans. 3–6.

Other than identifying, collecting, and processing different data and using computer hardware and/or software components to optimize the processing, Appellant does not adequately explain “how the claim

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limitations are rooted in computer technology, and how the claim limitations are solving a technical problem that only arises in machine learning technology.” Adv. Act. 2. Thus, we agree with the Examiner that “[t]he claims are not rooted in machine learning technology, and the claims do not solve a technical problem that only arises in machine learning technology.” *Id.*; see MPEP § 2106.05(a); *2019 Revised Patent Subject Matter Eligibility Guidance*, 84 Fed. Reg. at 55 n.25.

Appellant does not contend that the pending claims recite a transformation or reduction of a particular article to a different state or thing or other meaningful limitations beyond generally linking the use of the abstract idea to a particular technological environment. Such contentions are waived.

In view of Appellant’s claim recitations and the Specification’s disclosure, and consistent with the Examiner’s findings, we are persuaded the rejected claims do not recite:

- (i) an improvement to the functioning of a computer;
- (ii) an improvement to another technology or technical field;
- (iii) an application of the abstract idea with, or by use of, a particular machine;
- (iv) a transformation or reduction of a particular article to a different state or thing; or
- (v) other meaningful limitations beyond generally linking the use of the abstract idea to a particular technological environment.

See MPEP § 2106.05(a)–(c), (e)–(h); *see also* Ans. 7 (discussing MPEP §§ 2106.05(b) and 2106.05(f)). Thus, we are persuaded the additional elements of the rejected claims do not integrate the identified abstract idea into a practical application and the claims are directed to an abstract idea.

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3. *Step 2B — Not Significantly More Than the Abstract Idea*

Because we determine that the claims recite an abstract idea *and* do not integrate that abstract idea into a practical application, we now consider whether the claims include additional limitations, such that the claims amount to significantly more than the abstract idea. Applying the second part of the *Alice/Mayo* framework, the Examiner finds:

Claims 1, 17, and 21 do appear to recite additional elements that would be analyzed under the second part of the Mayo test, these additional elements are hardware circuits, programmable hardware devices, and non-transitory computer readable storage media. All of the claimed steps are directed towards the abstract idea described above. The claims do recite that the method is computer-implemented. However, this is merely a generic computer implementation that does not amount to significantly more. Looking at the limitations as an ordered combination adds nothing that is not already present when looking at the elements taken individually. There is no indication that the combination of elements improves the functioning of a computer or improves another technology. Their collective functions merely provide conventional computer implementations.

Final Act. 3; *see* Ans. 6–7.

Appellant contends that the Examiner fails to provide sufficient evidence that these elements are well-understood, routine, and conventional to a skilled artisan, as required by our reviewing court in *Berkheimer v. HP Inc.*, 881 F.3d 1360 (Fed. Cir. 2018). Appeal Br. 7–9; Reply Br. 5–6. Nevertheless, as the Office explains, a finding that additional elements are well-understood, routine, and conventional may be supported by:

A citation to an express statement in the specification . . . that demonstrates the well-understood, routine, conventional nature of the additional element(s). *A specification demonstrates the well-understood, routine, conventional nature of additional elements when it describes the additional elements as well-*

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understood or routine or conventional (or an equivalent term), as a commercially available product, or in a manner that indicates that the additional elements are sufficiently well-known that the specification does not need to describe the particulars of such additional elements to satisfy 35 U.S.C. § 112(a).

USPTO Memorandum of April 19, 2018, “*Changes in Examination Procedure Pertaining to Subject Matter Eligibility, Recent Subject Matter Eligibility Decision (Berkheimer v. HP, Inc.)*” 3–4 (Apr. 19, 2018) (emphasis added; (hereinafter the “*Berkheimer* Memorandum”)).⁷

Here, the Specification explains, “the disclosure may be practiced without one or more of the specific details, or with other methods, components, materials, and so forth. In other instances, *well-known structures, materials, or operations* are not shown or described in detail to avoid obscuring aspects of the disclosure.” Spec. ¶ 35 (emphasis added). For the reasons discussed here and above, we are persuaded that the Specification adequately demonstrates that the additional limitations of the claimed methods and apparatus are well-understood, conventional, and routine. *See, e.g.*, Spec. ¶¶ 27–33, 35–39, 46, 63–65; *see also id.* ¶¶ 128–130 (describing data collection).

On this record, we agree with the Examiner that independent claim 1, as well as independent claims 17 and 21, is directed to an abstract idea and fails to recite “significantly more” than the identified abstract idea. Thus, we are not persuaded that the Examiner errs in determining that the independent claims are patent-ineligible, and we sustain the rejection of claims 1, 17, and 21.

⁷ Available at <https://www.uspto.gov/sites/default/files/documents/memo-berkheimer-20180419.PDF>.

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E. Remaining Claims

As noted above, each of claims 2, 3, 6–16, 18–20, and 22 depends directly or indirectly from independent claim 1, 17, or 21. As noted above, Appellant challenges the rejection of dependent claims 2, 3, 6–16, 18–20, and 22 for the same reasons as their base claims. Because we are not persuaded the Examiner errs with respect to the patent ineligibility rejection of claim 1, 17, or 21, we also are not persuaded the Examiner errs with respect to the rejection of claims 2, 3, 6–16, 18–20, and 22. For this reason, we also sustain the rejection of those claims.

DECISION

1. The Examiner does not err in rejecting claims 1–3 and 6–22 under 35 U.S.C. § 101, as directed to patent-ineligible subject matter without significantly more.
2. Thus, on this record, claims 1–3 and 6–22 are not patent eligible.

CONCLUSION

We affirm the Examiner’s rejection of claims 1–3 and 6–22.

In summary:

Claims Rejected	35 U.S.C. §	Basis	Affirmed	Reversed
1–3, 6–22	101	Eligibility	1–3, 6–22	

No time for taking any action connected with this appeal may be extended under 37 C.F.R. § 1.136(a)(1).

AFFIRMED